S/M Code No.88-043 DATE OF ISSUE 7/1988-1

AIWA®

X-55
CP-55
CDX-55

SERVICE MANUAL

STEREO SYSTEM

- BASIC TAPE MECHANISM : TN-21FZW
- TYPE. U, C, E, K, Z

			U	C	E	K	Z
X-55	CASSEIVER	CX-S55	●	●		●	
	TURNTABLE	PX-SE55 ※1	●	●		●	
	SPEAKER	SX-S55A	●	●		●	
CP-55	CASSEIVER	CX-S55			●		●
	TURNTABLE	PX-SE55 ※1			●		●
CDX-55	CASSEIVER	CX-S55			●		
	COMPACT DISC	DX-SM45 ※2			●		

※1 As to the service information of PX-SE55 (turntable), see the individual service manual of PX-E55/E88.

※2 As to the service information of DX-SM45 (compact disc) see the individual service manual of DX-M45/M78/M755.

AIWA Co., Ltd. Tokyo Japan
Printed in Japan

SPECIFICATIONS

<Receiver>

Power source	CX-55E, Z 220 V, 50/60 Hz CX-55K 240 V, 50/60 Hz CX-55U, C 120 V, 60 Hz
Power consumption	CX-55E, K, Z 120 W CX-55U 65 W CX-55C 120 W
Power output	20 W+20 W (6 ohms+16 ohms, DIN) <FTC Rule U, C model only> 20 Watts per channel, Min. RMS at 6 ohms+16 ohms, from 40 Hz–20 kHz, with no more than 1% Total Harmonic Distortion.
Frequency response (Playback)	NORMAL tape: 40–12,500 Hz CrO₂ tape: 40–14,000 Hz (PB only) METAL tape: 40–16,000 Hz (PB only)
Signal-to-noise ratio	58 dB (NORMAL tape, DOLBY B NR ON, JIS-A)
Frequency ranges	FM: 87.5–108 MHz AM (MW): 530–1,605 kHz LW: 150–285 kHz
Antenna	FM: 75 ohms AM (MW/LW): Loop antenna
Wow & flutter	0.17% (WRMS)
Output terminals	SPEAKERS: 6 ohms+16 ohms HEADPHONES: 8 ohms
Input terminals (Sensitivity/impedance)	PHONO: 220 mV/47 k ohms VCR (VCR/AUX): 150 mV–550 mV/47 k ohms CD: 250 mV/47 k ohms
Dimensions	360(W) × 296(H) × 337(D) mm
Weight	6.3 kg

<Speaker>

Type	2-way Bass reflex type
Speaker	170 mm cone type woofer 50 mm cone type tweeter
Impedance	6 ohms
Allowable maximum input	30 W
Dimensions	255(W) × 430(H) × 170(D) mm
Weight	2.9 kg

- Design and specifications are subject to change without notice.
- Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation
- "DOLBY" and the double-D symbol DD are trademarks of Dolby Laboratories Licensing Corporation.

ELECTRICAL MAIN PARTS LIST

REF.NO.	PART NO.	DESCRIPTION
===IC===		
	87-020-981-019	IC,CX-1102
	87-020-566-019	IC,LA1265
	87-001-376-019	IC,LC7218
	87-020-680-019	IC,NJM2068S
	87-020-758-019	IC,NJM2068SD
	87-020-899-019	IC,STK4122-2
	87-027-867-019	IC,TA7343P
	87-001-207-010	IC,UPD7528ACU-210
===TRANSISTOR===		
	89-501-615-019	FET,2SK161GR
	89-502-415-019	FET,2SK241GR
	89-502-464-089	FET,2SK246Y
	89-503-735-019	FET,2SK373
	87-026-165-019	FET,3SK73GR(Z ONLY)
	89-110-155-019	TRANSISTOR,2SA1015(GR)
	89-110-155-019	TRANSISTOR,2SA1015(GR)
	89-209-412-010	TRANSISTOR,2SB941
	89-313-834-019	TRANSISTOR,2SC1383R,S(E,K,Z ONLY)
	89-318-155-019	TRANSISTOR,2SC1815(GR)
	89-318-154-019	TRANSISTOR,2SC1815(Y)
	89-319-233-019	TRANSISTOR,2SC1923(0)
	89-320-011-019	TRANSISTOR,2SC2001K
	89-309-456-019	TRANSISTOR,2SC945LP
	89-419-130-019	TRANSISTOR,2SD1913
	87-026-376-010	TRANSISTOR,RN2203

REF.NO.	PART NO.	DESCRIPTION
===DIODE===		
	82-596-799-089	DIODE,1N4002
	87-020-465-019	DIODE,1SS133
	87-020-285-019	DIODE,DBA30C
	87-020-123-019	DIODE,DS446
	87-027-900-019	DIODE,VALICAP 1SV147
	81-754-634-019	DIODE,VALICAP KV1260
	87-027-393-019	DIODE,ZENER HZ-4C2
	87-027-475-019	DIODE,ZENER HZ-6B1
	87-027-332-019	DIODE,ZENER HZ-6B1L
	87-027-474-019	DIODE,ZENER HZ11A2
	87-027-556-019	DIODE,ZENER HZ11B3
	87-027-676-019	DIODE,ZENER HZ12B3L
	87-027-451-019	DIODE,ZENER HZ27-2L
	87-027-320-010	DIODE,ZENER HZ7C2
===MAIN CIRCUIT BOARD SECTION===		
PCB-A	*	MAIN CIRCUIT BOARD
⚠	*87-033-147-019	CLAMP FUSE
BPF1	*87-030-105-010	FILTER BPMB 6A(Z ONLY)
C102	*87-018-134-019	CAP,CERA-SOL SS 0.01
C103	*87-018-100-019	CAP,CERA-SOL 4.7P(E,K,U,C ONLY)
C103	*87-018-105-019	CAP,CERA-SOL SS 12P(Z ONLY)
C104	*87-018-134-019	CAP,CERA-SOL SS 0.01
C105	*87-018-105-019	CAP,CERA-SOL SS 12P(Z ONLY)
C105	*87-018-102-019	CAP,CERA-SOL SS 6.8P(E,K,U,C ONLY)
C106	*87-018-102-019	CAP,CERA-SOL SS 6.8P(E,K,U,C ONLY)
C107	*87-018-097-019	CAP,CERA-SOL SS 2.2P SL(Z ONLY)

REF.NO.	PART NO.	DESCRIPTION
C107	★87-018-098-089	CAP,CERA-SOL SS 3.3P(E,K,U,C ONLY)
C108	★87-018-100-019	CAP,CERA-SOL 4.7P(E,K,U,C ONLY)
C108	★87-018-106-019	CAP,CERA-SOL SS 15P SL(Z ONLY)
C109	★87-018-096-019	CAP,CERA-SOL SS 1P
C110	★87-018-119-019	CAP,CERA-SOL SS 100P
C111	★87-018-134-019	CAP,CERA-SOL SS 0.01
C112	★87-018-116-019	CAP,CERA-SOL SS 56P
C113	★87-018-107-019	CAP,CERA-SOL SS 18P
C114	★87-018-134-019	CAP,CERA-SOL SS 0.01
C115	★87-018-134-019	CAP,CERA-SOL SS 0.01(U,C ONLY)
C117	★87-018-134-019	CAP,CERA-SOL SS 0.01
C118	★87-018-134-019	CAP,CERA-SOL SS 0.01
C119	★87-010-401-019	CAP,ELECT 1-50V
C120	★87-018-134-019	CAP,CERA-SOL SS 0.01
C121	★87-018-134-019	CAP,CERA-SOL SS 0.01
C122	★87-010-379-019	CAP,ELECT 22-16V SME
C123	★87-018-125-019	CAP,CERA-SOL SS 330P
C125	★87-018-134-019	CAP,CERA-SOL SS 0.01
C126	★87-018-134-019	CAP,CERA-SOL S 0.01(E,K,Z ONLY)
C127	★87-018-134-019	CAP,CERA-SOL SS 0.01
C129	★87-018-100-019	CAP,CERA-SOL 4.7P(Z ONLY)
C130	★87-018-134-019	CAP,CERA-SOL SS 0.01
C131	★87-018-105-019	CAP,CERA-SOL SS 12P(Z ONLY)
C133	★87-010-402-019	CAP,ELECT 2.2-50V(Z ONLY)
C134	★87-010-402-019	CAP,ELECT 2.2-50V
C135	★87-010-402-019	CAP,ELECT 2.2-50V(Z ONLY)
C151	★87-010-544-019	CAP,ELECT 0.1-50V
C152	★87-014-049-089	CAP,PP 470P
C154	★87-018-121-019	CAP,CERA-SOL SS 150P(E,K,Z ONLY)
C155	★87-014-050-019	CAP,PP 510P(E,K,Z ONLY)
C156	★87-018-134-019	CAP,CERA-SOL SS 0.01
C157	★87-018-134-019	CAP,CERA-SOL SS 0.01
C158	★87-018-134-019	CAP,CERA-SOL SS 0.01
C159	★87-010-404-089	CAP,ELECT 4.7/50V SME
C160	★87-010-378-019	CAP,ELECT 10-16V
C161	★87-010-544-019	CAP,ELECT 0.1-50V
C162	★87-010-403-019	CAP,ELECT 3.3-50V SME
C163	★87-018-134-019	CAP,CERA-SOL SS 0.01
C165	★87-010-402-019	CAP,ELECT 2.2-50V
C166	★87-018-134-019	CAP,CERA-SOL S 0.01(E,K,Z ONLY)
C168	★87-010-263-019	CAP,ELECT 100-10V
C169	★87-018-134-019	CAP,CERA-SOL S 0.01
C201	★87-010-401-019	CAP,ELECT 1-50V
C202	★87-010-403-019	CAP,ELECT 3.3-50V SME
C203	★87-014-057-019	CAP,PP 0.001
C204	★87-010-248-019	CAP,ELECT 220-10V
C205	★87-010-378-019	CAP,ELECT 10-16V
C206	★87-018-134-019	CAP,CERA-SOL SS 0.01
C209	★87-010-402-019	CAP,ELECT 2.2-50V
C210	★87-010-402-019	CAP,ELECT 2.2-50V
C211	★87-018-195-019	CAP,CERA-SOL SS 1200P
C212	★87-018-199-019	CAP,CERA-SOL SS 3300P
C213	★87-018-199-019	CAP,CERA-SOL SS 3300P
C214	★87-018-195-019	CAP,CERA-SOL SS 1200P
C215	★87-018-134-019	CAP,CERA-SOL SS 0.01
C251	★87-018-114-019	CAP,CERA-SOL SS 39P
C253	★87-018-119-019	CAP,CERA-SOL SS 100P
C254	★87-018-134-019	CAP,CERA-SOL SS 0.01
C255	★87-010-252-019	CAP,ELECT 1000-6.3
C256	★87-010-401-019	CAP,ELECT 1-50V
C257	★87-010-404-089	CAP,ELECT 4.7/50V SME
C258	★87-018-134-019	CAP,CERA-SOL SS 0.01
C259	★87-010-384-019	CAP,ELECT 100-25V
C261	★87-018-134-019	CAP,CERA-SOL SS 0.01
C262	★87-018-134-019	CAP,CERA-SOL SS 0.01
C264	★87-018-134-019	CAP,CERA-SOL SS 0.01
C265	★87-018-131-019	CAP,CERA-SOL SS 1000P
C266	★87-018-047-019	CAP,DERA-SOL 0.01(Z ONLY)
C267	★87-018-047-019	CAP,DERA-SOL 0.01(Z ONLY)
C268	★87-010-378-019	CAP,ELECT 10-16V
C269	★87-018-047-019	CAP,CERA-SOL 0.01
C301	★87-018-127-019	CAP,CERA-SOL SS 470P
C302	★87-018-127-019	CAP,CERA-SOL 470P
C305	★87-010-401-019	CAP,ELECT 1-50V
C306	★87-010-401-019	CAP,ELECT 1-50V
C307	★87-018-127-019	CAP,CERA-SOL SS 470P
C308	★87-018-127-019	CAP,CERA-SOL SS 470P
C311	★87-010-401-019	CAP,ELECT 1-50V
C312	★87-010-401-019	CAP,ELECT 1-50V
C313	★87-010-402-019	CAP,ELECT 2.2-50V
C314	★87-010-402-019	CAP,ELECT 2.2-50V
C319	★87-018-119-019	CAP,CERA-SOL SS 100P
C320	★87-018-119-019	CAP,CERA-SOL SS 100P
C321	★87-018-121-019	CAP,CERA-SOL SS 150P
C322	★87-018-121-019	CAP,CERA-SOL SS 150P
C323	★87-010-401-019	CAP,ELECT 1-50V
C324	★87-010-401-019	CAP,ELECT 1-50V
C325	★87-010-401-019	CAP,ELECT 1-50V
C326	★87-010-401-019	CAP,ELECT 1-50V
C327	★87-018-123-019	CAP,CERA-SOL SS 220P
C328	★87-018-123-019	CAP,CERA-SOL SS 220P
C329	★87-018-123-019	CAP,CERA-SOL SS 220P
C330	★87-018-123-019	CAP,CERA-SOL SS 220P
C331	★87-010-404-019	CAP,ELECT 4.7-50V SME
C332	★87-010-404-019	CAP,ELECT 4.7-50V SME
C333	★87-010-404-019	CAP,ELECT 4.7-50V SME
C334	★87-010-404-019	CAP,ELECT 4.7-50V SME
C335	★87-010-256-019	CAP,ELECT 0.68-50V
C336	★87-010-256-019	CAP,ELECT 0.68-50V
C337	★87-018-115-019	CAP,CERA-SOL SS 47P(Z ONLY)
C338	★87-018-115-019	CAP,CERA-SOL SS 47P(Z ONLY)
C339	★87-018-134-019	CAP,CERA-SOL SS 0.01
C340	★87-018-134-019	CAP,CERA-SOL SS 0.01
C341	★87-018-134-019	CAP,CERA-SOL SS 0.01
C342	★87-010-371-019	CAP,ELECT 470-6.3V
C343	★87-010-371-019	CAP,ELECT 470-6.3V
C344	★87-018-134-019	CAP,CERA-SOL S 0.01(Z ONLY)
C345	★87-018-131-019	CAP,CERA-SOL SS 1000P
C346	★87-018-131-019	CAP,CERA-SOL SS 1000P
C347	★87-018-115-019	CAP,CERA-SOL SS 47P(Z ONLY)
C348	★87-018-115-019	CAP,CERA-SOL SS 47P(Z ONLY)
C349	★87-018-134-019	CAP,CERA-SOL SS 0.01
C350	★87-018-134-019	CAP,CERA-SOL SS 0.01
C351	★87-010-406-019	CAP,ELECT 22-50V
C352	★87-010-380-019	CAP,ELECT 47-16V
C353	★87-010-380-019	CAP,ELECT 47-16V
C354	★87-018-134-019	CAP,CEAR-SOL S 0.01(Z ONLY)
C355	★87-010-404-089	CAP,ELECT 4.7/50V SME
C356	★87-010-263-019	CAP,ELECT 100-10V
C357	★87-010-380-019	CAP,ELECT 47-16V
C358	★87-010-101-019	CAP,ELECT 220-16V
C359	★87-018-134-019	CAP,CERA-SOL SS 0.01
C360	★87-010-112-019	CAP,ELECT 100-16V
C365	★87-018-199-019	CAP,CERA-SOL SS 3300P(Z ONLY)
C366	★87-018-199-019	CAP,CERA-SOL SS 3300P(Z ONLY)
C367	★87-018-119-019	CAP,CERA-SOL SS 100P(Z ONLY)
C368	★87-018-119-019	CAP,CERA-SOL SS 100P(Z ONLY)
C369	★87-018-119-019	CAP,CERA-SOL SS 100P(Z ONLY)
C370	★87-018-119-019	CAP,CERA-SOL SS 100P(Z ONLY)
C371	★87-018-134-019	CAP,CERA-SOL SS 0.01
C372	★87-018-134-019	CAP,CERA-SOL SS 0.01
C373	★87-018-119-019	CAP,CERA-SOL SS 100P(Z ONLY)
C374	★87-018-119-019	CAP,CERA-SOL SS 100P(Z ONLY)
C501	★87-018-134-019	CAP,CERA-SOL SS 0.01
C502	★87-010-248-019	CAP,ELECT 220-10V
C503	★87-010-263-019	CAP,ELECT 100-10V

REF.NO.	PART NO.	DESCRIPTION
C504	★87-010-380-019	CAP,ELECT 47-16V
C505	★87-018-134-019	CAP,CERA-SOL SS 0.01
C506	★87-010-101-019	CAP,ELECT 220-16V
C507	★87-010-402-019	CAP,ELECT 2.2-50V
C508	★87-018-125-019	CAP,CERA-SOL SS 330P
C509	★87-010-246-019	CAP,ELECT 47-35V
C510	★87-010-393-019	CAP,ELECT 100-35V SME
C511	★87-010-384-019	CAP,ELECT 100-25V
C512	★87-010-453-019	CAP,ELECT 4700-25V
C513	★87-010-380-019	CAP,ELECT 47-16V
C514	★87-010-112-019	CAP,ELECT 100-16V
C515	★82-186-685-019	CAP,ELECT 3300-35V
C516	★82-186-685-019	CAP,ELECT 3300-35V
C517	★87-010-263-019	CAP,ELECT 100-10V
C518	★87-010-378-019	CAP,ELECT 10-16V
C519	★87-010-404-019	CAP,ELECT 4.7-50V SME
C520	★87-010-112-019	CAP,ELECT 100-16V
C521	★87-010-378-019	CAP,ELECT 10-16V
C522	★87-010-112-019	CAP,ELECT 100-16V
C523	★87-018-127-019	CAP,CERA-SOL SS 470P
C524	★87-018-127-019	CAP,CERA-SOL SS 470P
C525	★87-010-404-019	CAP,ELECT 4.7-50V SME
C526	★87-010-404-019	CAP,ELECT 4.7-50V SME
C527	★87-010-379-019	CAP,ELECT 22-16V SME
C528	★87-010-379-019	CAP,ELECT 22-16V SME
C529	★87-010-408-019	CAP,ELECT 47-50V
C530	★87-010-408-019	CAP,ELECT 47-50V
C533	★87-010-408-019	CAP,ELECT 47-50V
C534	★87-010-405-019	CAP,ELECT 10-50V SME
C535	★87-018-131-019	CAP,CERA-SOL SS 1000P(E,K,U,C ONLY)
C541	★87-010-265-019	CAP,ELECT 33-16V(Z ONLY)
C542	★87-018-032-019	CAP,CEAR-SOL S 100P(Z ONLY)
C543	★87-018-032-019	CAP,CEAR-SOL S 100P(Z ONLY)
C544	★87-018-024-019	CAP,CERA-SOL SS 47P(Z ONLY)
C545	★87-018-024-019	CAP,CERA-SOL SS 47P(Z ONLY)
C546	★87-018-047-019	CAP,CERA-SOL 0.01(Z ONLY)
C547	★87-018-047-019	CAP,CERA-SOL 0.01(Z ONLY)
C548	★87-018-047-019	CAP,CERA-SOL 0.01(Z ONLY)
C549	★87-018-047-019	CAP,CERA-SOL 0.01(Z ONLY)
C550	★87-018-131-019	CAP,CERA-SOL SS 1000P(Z ONLY)
C551	★87-018-131-019	CAP,CERA-SOL SS 1000P(Z ONLY)
C552	★87-012-105-019	CAP,CERA-SOL 0.022(Z ONLY)
C553	★87-012-105-019	CAP,CERA-SOL 0.022(Z ONLY)
C554	★87-018-046-019	CAP,CERA-SOL 4700P(Z ONLY)
C555	★87-018-046-019	CAP,CERA-SOL 4700P(Z ONLY)
CF101	★82-799-621-019	CF MS2-A(Z ONLY)
CF101	★87-008-261-019	FILTER SFE 10.7 MA5-A(E,K,U,C ONLY)
CF102	★87-008-261-019	FILTER SFE 10.7 MA5-A
CF103	★82-794-670-019	FILTER BFU 450C4N
CF104	★87-008-261-019	FILTER SFE 10.7 MA5-A(Z ONLY)
⚠F1	87-035-361-010	FUSE 800MMA T(E,K,Z ONLY)
⚠F1	87-035-296-010	FUSE 800MMA(U,C ONLY)
⚠F2	87-035-361-010	FUSE 800MMA T(E,K,Z ONLY)
⚠F2	87-035-296-010	FUSE 800MMA(U,C ONLY)
⚠FR101	87-029-082-019	RES,FUSIBLE 1/4W 100
⚠FR102	87-029-082-019	RES,FUSIBLE 1/4W 100
⚠FR103	87-029-105-019	RES,FUSIBLE 1/2W 10(E,K,U,C ONLY)
⚠FR103	87-029-366-019	RES,FUSIBLE 1/2W 4.7(Z ONLY)
⚠FR104	87-029-105-019	RES,FUSIBLE 1/2W 10(E,K,U,C ONLY)
⚠FR104	87-029-366-019	RES,FUSIBLE 1/2W 4.7(Z ONLY)
⚠FR105	87-029-089-019	RES,FUSIBLE 1/4W 4.7
⚠FR106	87-029-082-019	RES,FUSIBLE 1/4W 100(U,C ONLY)
⚠FR106	87-029-102-019	RES,FUSIBLE 1/4W 47(E,K,Z ONLY)
⚠FR107	87-029-089-019	RES,FUSIBLE 1/4W 4.7
⚠FR108	87-029-008-010	RES,FUSIBLE 1/4W 10(Z ONLY)
J101	★81-631-646-019	ANT TERM 2P PAL(ANTENNA)(E,K,Z ONLY)
J101	★81-631-645-019	ANT TERM 4P(ANTENNA)(U,C ONLY)
J102	★87-049-868-019	JACK PIN 4P(AUX/CD)

REF.NO.	PART NO.	DESCRIPTION
J103	★87-033-195-019	TERM 4P(SPEAKERS)
J104	87-049-941-019	JACK 3.5 2P(SURROUND SPEAKERS)
J105	87-049-855-019	JACK 6.3-W/S(PHONES)
J201	87-049-833-019	5P CONNECTOR SOCKET(PHONO)
L101	★81-631-649-010	COIL ANT 2-3/4
L102	★81-794-716-010	COIL ANT3/4 T
L103	★82-791-627-019	COIL FM ANT 2
L104	★82-702-638-019	COIL FM DIA 6
L105	★87-005-151-019	COIL 2.2UH
L106	★82-794-683-019	COIL IFT FM
L107	★82-702-621-019	COIL FM OSC (7K)
L108	★81-631-611-019	COIL QUAD(S)
L109	★82-702-638-019	COL FM DIA6 (Z ONLY)
L110	★82-794-687-019	FILTER ANTI BIRDIE (Z ONLY)
L151	★81-631-655-019	COIL MW ANT-12(S)
L152	★82-794-687-019	COIL OSC MW
L153	★81-631-656-019	COIL LW ANT-10R(S)(E,K,Z ONLY)
L154	★82-794-688-019	COIL OSC LW(E,K,Z ONLY)
L155	★81-701-642-019	COIL CFLZ-450A
L201	★81-631-643-019	COIL 1 POLE MPX
L202	★81-631-643-019	COIL 1 POLE MPX
L311	★87-005-385-019	COIL,2UH (Z ONLY)
L312	★87-005-385-019	COIL,2UH (Z ONLY)
L313	★87-003-125-019	COIL,J 3.3MMH
L314	★87-003-125-019	COIL,J 3.3MMH
L315	★87-003-130-019	MICRO INDUCTOR 8.2MMH
L316	★87-003-130-019	MICRO INDUCTOR 8.2MMH
L321	★81-794-661-019	COIL OSC
RY101	★87-045-285-010	RELAY VB12MP
S11	81-631-610-019	ROTARY SW(FUNCTION)
S12	+ + +	ROTARY SW(FUNCTION)
S13	+ + +	ROTARY SW(FUNCTION)
S14	+ + +	ROTARY SW(FUNCTION)
SFR14	87-021-864-019	SFR 10K(VCR INPUT LEVEL)
SFR15	87-021-864-019	SFR 10K(VCR INPUT LEVEL)
SFR201	87-021-742-019	SFR 10K
SFR301	87-021-735-019	SFR 220B
SFR302	87-021-735-019	SFR 220B
SFR303	87-021-743-019	SFR 22KB
SFR304	87-021-743-019	SFR 22KB
SFR305	87-021-744-019	SFR 33K
SFR306	87-021-744-019	SFR 33K
SFR307	87-021-822-010	SFR 3.3K
TC101	★87-011-155-019	CAP,TRIMMER CERAMIC 10P
TC102	★87-011-155-019	CAP,TRIMMER CERAMIC 10P
TC103	★87-011-155-019	CAP,TRIMMER CERAMIC 10P(Z ONLY)
TC151	★87-011-164-019	CAP,TRIMMER CARAMIC 30P
TC152	★87-011-164-019	CAP,TRIMMER CARAMIC 30P(E,K,Z ONLY)
TC251	★87-011-131-019	CAP,TRIMMER 30P
X251	87-030-122-019	CRYSTAL 7.2M

===FRONT CIRCUIT BOARD SECTION===

PCB-B	*	FRONT CIRCUIT BOARD
C601	★87-010-401-019	CAP,ELECT 1-50V
C602	★87-010-401-019	CAP,ELECT 1-50V
C605	★87-010-404-019	CAP,ELECT 4.7-50V SME
C606	★87-010-404-019	CAP,ELECT 4.7-50V SME
C619	★87-018-134-019	CAP,CERA-SOL SS 0.01
C620	★87-018-134-019	CAP,CERA-SOL SS 0.01
C623	★87-010-544-019	CAP,ELECT 0.1-50V
C624	★87-010-544-019	CAP,ELECT 0.1-50V
C625	★87-010-545-019	CAP,ELECT 0.22-50V SM
C626	★87-010-545-019	CAP,ELECT 0.22-50V SM
C629	★87-010-384-019	CAP,ELECT 100-25V
C701	★87-010-379-019	CAP,ELECT 22-16V SME
C702	★87-018-113-019	CAP,CERA-SOL SS 33P
C703	★87-010-394-019	CAP,ELECT 220-35V SME
C704	★87-018-209-019	CAP,CERA-SOL 0.1

REF.NO.	PART NO.	DESCRIPTION
C705	★87-010-252-019	CAP,ELECT 1000-6.3V
C706	★87-010-379-019	CAP,ELECT 22-16V SME
C707	★87-010-382-019	CAP,ELECT 22-50V SME
C708	★87-018-134-019	CAP,CERA-SOL SS 0.01
C709	★87-018-134-019	CAP,CERA-SOL SS 0.01
C710	★87-018-123-019	CAP,CERA-SOL SS 220P
C711	★87-018-123-019	CAP,CERA-SOL SS 220P
C712	★87-018-123-019	CAP,CERA-SOL SS 220P
C713	★87-018-127-019	CAP,CERA-SOL SS 470P
C714	★87-018-127-019	CAP,CERA-SOL SS 470P
C715	★87-018-134-019	CAP,CERA-SOL SS 0.01(Z ONLY)
C716	★87-018-134-019	CAP,CERA-SOL SS 0.01(Z ONLY)
FL701	81-783-662-019	FL,2PRO EX
L701	★87-003-152-019	COIL CHOKE 100UH
L702	★87-003-152-019	COIL CHOKE 100UH
LED1	87-020-551-019	LED TLG208(DOLBY B NR)
LED2	87-027-731-019	LED SR-535D(POWER)
S21	87-036-075-019	PUSH SW(DOLBY B NR)
S22	+ + +	PUSH SW(DOLBY B NR)
S31	87-036-075-019	PUSH SW(TAPE SELECTOR)
S32	+ + +	PUSH SW(TAPE SELECTOR)
SW701	87-031-771-010	TACT SW(M1)
SW702	87-031-771-010	TACT SW(M2)
SW703	87-031-771-010	TACT SW(M3)
SW704	87-031-771-010	TACT SW(M4)
SW705	87-031-771-010	TACT SW(M5)
SW706	87-031-771-010	TACT SW(M6)
SW707	87-031-771-010	TACT SW(M7)
SW708	87-031-771-010	TACT SW(M8)
SW709	87-031-771-010	TACT SW(FM)
SW710	87-031-771-010	TACT SW(MW)
SW711	87-031-771-010	TACT SW(LW)(E,K,Z ONLY)
SW712	87-031-771-010	TACT SW(POWER)
SW713	87-031-771-010	TACT SW(ONCE)
SW714	87-031-771-010	TACT SW(MEMORY)
SW715	87-031-771-010	TACT SW(DOWN)
SW716	87-031-771-010	TACT SW(UP)
SW717	87-031-771-010	TACT SW(TIMER/FREQ)
SW718	87-031-771-010	TACT SW(TIMER STANDBY)
SW719	87-031-771-010	TACT SW(SET)
SW720	87-031-771-010	TACT SW(EVERY)
SW721	87-031-771-010	TACT SW(SLEEP)
SW722	84-722-613-019	SLIDE SW(MONO/STEREO)
VR1	81-631-642-019	VOLUME SLIDE 100KB(G.EQ.70HZ)
VR2	+ + +	VOLUME SLIDE 100KB(G.EQ.70HZ)
VR3	81-631-642-019	VOLUME SLIDE 100KB(G.EQ.350HZ)
VR4	+ + +	VOLUME SLIDE 100KB(G.EQ.350HZ)
VR5	81-631-642-019	VOLUME SLIDE 100KB(G.EQ.1KHZ)
VR6	+ + +	VOLUME SLIDE 100KB(G.EQ.1KHZ)
VR7	81-631-642-019	VOLUME SLIDE 100KB(G.EQ3.5KHZ)
VR8	+ + +	VOLUME SLIDE 100KB(G.EQ3.5KHZ)
VR9	81-631-642-019	VOLUME SLIDE 100KB(G.EQ.10KHZ)
VR10	+ + +	VOLUME SLIDE 100KB(G.EQ.10KHZ)
VR11	81-631-644-019	VOLUME ROTALY 50KA(VOLUME)
VR12	+ + +	VOLUME ROTALY 50KA(VOLUME)
VR13	81-626-624-019	ROTALY VOLUME 50KW(BALANCE)

===POWER CIRCUIT BOARD SECTION===

REF.NO.	PART NO.	DESCRIPTION
PCB-C	*	POWER CIRCUIT BOARD
△	87-033-147-019	CLAMP FUSE
△C550	★87-019-112-019	LINE CAP 0.01E(Z ONLY)
△F3	87-035-300-010	FUSE 2A(UL)125V(U,C ONLY)
△F3	87-035-360-010	FUSE 630MMA T (E,K,Z ONLY)
△PT1	81-631-604-019	TRANS PT(C)(C ONLY)
△PT1	81-631-605-019	TRANS PT(E/N) (E,Z ONLY)
△PT1	81-631-606-019	TRANS PT(K)(K ONLY)
△PT1	81-631-603-019	TRANS PT(U)(U ONLY)

===LED CIRCUIT BOARD SECTION===

REF.NO.	PART NO.	DESCRIPTION
PCB-D	*	LED CIRCUIT BOARD
LED3	87-020-987-019	LED SLZ 981C-02-T1(VOLUME)
LED4	87-020-987-019	LED SLZ 981C-02-T1(VOLUME)

===TRANSISTOR CIRCUIT BOARD SECTION===

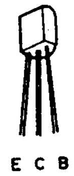
REF.NO.	PART NO.	DESCRIPTION
PCB-E	*	TRANSISTOR CIRCUIT BOARD (E,K,Z ONLY)

===MISCELLANEOUS===

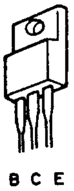
REF.NO.	PART NO.	DESCRIPTION
△	★87-034-975-018	AC CORD(K ONLY)
△	★87-034-731-01	AC CORD(U) (U,C ONLY)
△	★87-034-736-010	AC CORD(E)(E,Z ONLY)
△	★87-085-185-010	BUSHING AC CORD E(E,K,Z ONLY)
△	★87-085-189-010	AC CORD BUSHING (SPT-2)(U,C ONLY)
	★S6-202-010-750	PH(DECK1)
	★S6-202-010-750	RPH(DECK2)
C901	★87-018-134-019	CAP,CERA-SOL SS 0.01
EH	S6-202-140-210	ERASE HEAD (DECK2)
M901	★S6-002-030-190	MOTOR
S901	★S6-401-010-610	LEAF SW(REC DECK2)
S902	★S6-401-011-490	LEAF SW(MOTOR DECK2)
S903	★S6-401-011-490	LEAF SW(MOTOR DECK1)
S904	★S6-401-011-690	LEAF SW(PLAY DECK1)
S905	★S6-401-010-610	LEAF SW(HI SPEED DECK1)

Combination circuit Board A	**81-631-624-019 (E, K ONLY)** **81-631-627-019 (U, C ONLY)** **81-631-664-019 (Z ONLY)**	
PCB-A	**81-631-625-019 (E, K ONLY)** **81-631-628-019 (U, C ONLY)** **81-631-665-019 (Z ONLY)**	
PCB-C	**81-631-626-019 (E, K ONLY)** **81-631-629-019 (U, C ONLY)** **81-631-666-019 (Z ONLY)**	
PCB-E	**81-631-623-019 (E, K ONLY)** **81-631-663-019 (Z ONLY)**	

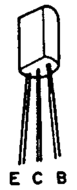
Combination circuit board B	**81-631-617-019**
PCB-B	**81-631-618-019**
PCB-D	**81-631-619-019**



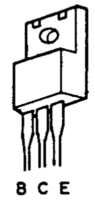
2SA1015
2SC945
2SC1815
2SC1923
2SC2001



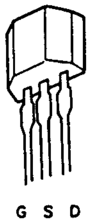
2SB941



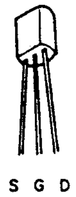
2SC1383



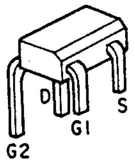
2SD1913



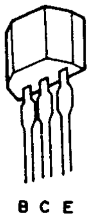
2SK161
2SK241



2SK246
2SK373



3SK73



RN2203

ADJUSTMENT

1. Clock Frequency Adjustment
   Settings : • Test point : TP (CLK)
   • Adjustment location : TC251
   Method : Set to MW 1611kHz (E, K, Z Model), 1610kHz (U, C, Model) and adjust so that the test point becomes 2061kHz±10Hz (E, K, Z Model), 2060kHz±10Hz (U, C Model).

2. MW VT Adjustment
   Settings : • Test point : TP (VT)
   • Adjustment location : L152
   Method : Set to MW, 1611kHz (E, K, Z Model), 1610kHz (U, C Model) and adjust so that the test point becomes 8.0±0.05V.

3. LW VT Adjustment (E, K, Z Model)
   Settings : • Test point : TP (VT)
   • Adjustment location : L154
   Method : Set to LW, 144kHz and adjust so that the test point becomes 1.5±0.05V.

4. AM IF Adjustment
   L155 • 450kHz

5. MW Tracking Adjustment
   L151 • • • 603kHz (E, K, Z MODEL), 600kHz (U, C MODEL)
   TC151 • 1404kHz (E, K, Z MODEL), 1400kHz (U, C MODEL)

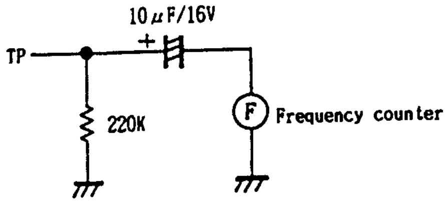
6. LW Tracking Adjustment (E, K, Z Model)
   L153 • 144kHz
   TC152 • 290kHz

7. FM VT Adjustment
   Settings : • Test point : TP (VT)
   • Adjustment location : L107
   Method : Set to FM 87.5MHz and adjust so that the test point becomes 3.0±0.05V.

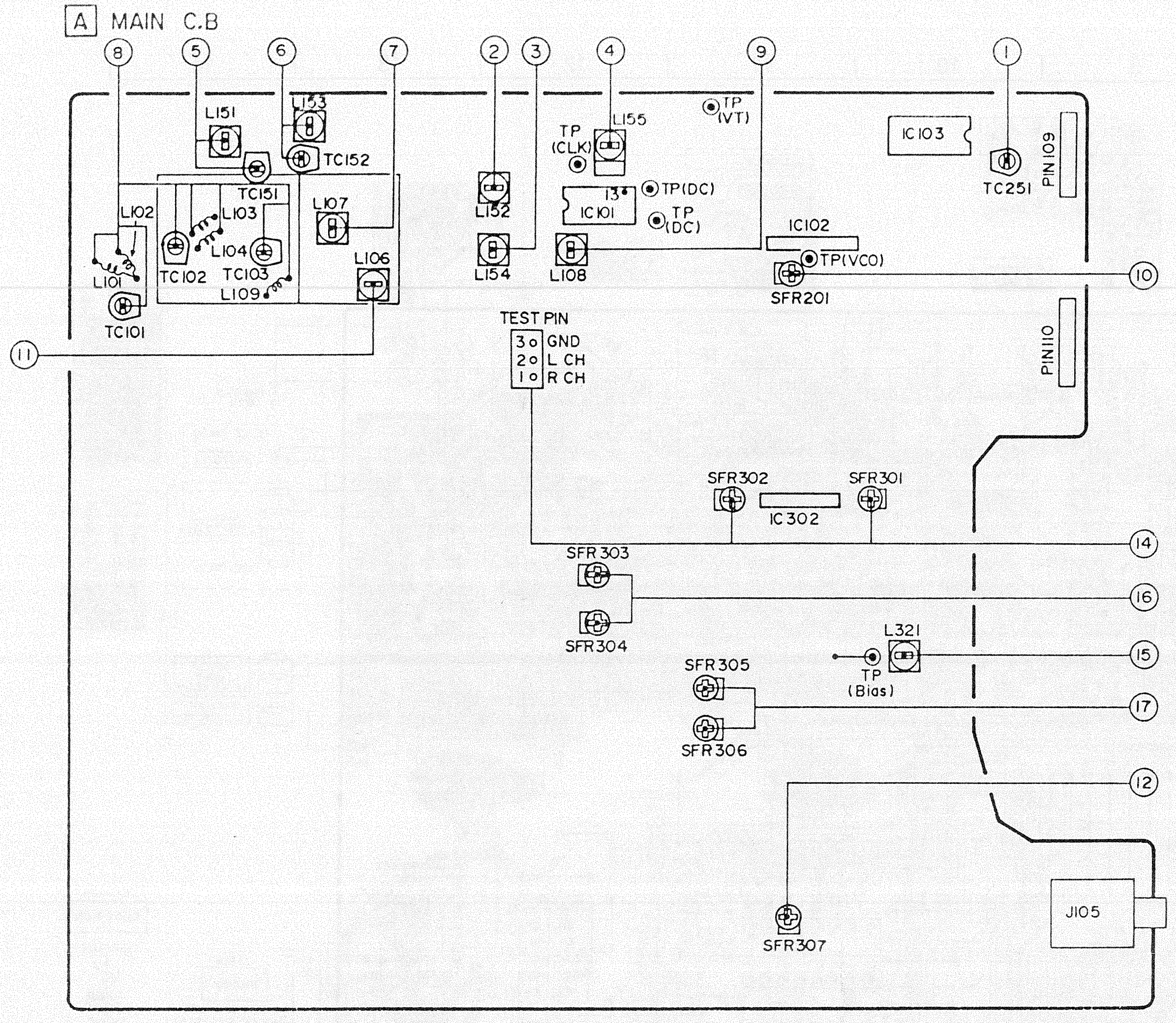
8. FM Tracking Adjustment
   L101, 102, 103, 104 • • • • • • • • • • • • • • 87.5MHz
   L101, 102, 103, 104, 109 (Z ONLY) • • • • • • 87.5MHz
   TC101, 102 • 108MHz
   TC101, 102, 103 (Z ONLY) • • • • • • • • • • • • • 108MHz

9. DC Balance/MONO Distortion Adjustment
   Settings : • Test point : TP (DC)
   TP (DC)
   TEST PIN (Dis)
   • Adjustment location : L108 (DC balance)
   Method : Set to FM 98MHz and adjust L108 so that TP (DC) output becomes 0±0.02V.
   Next, confirm to the distortion satisfy either standard (less than 0.5%).
   At the TEST PIN (Dis)

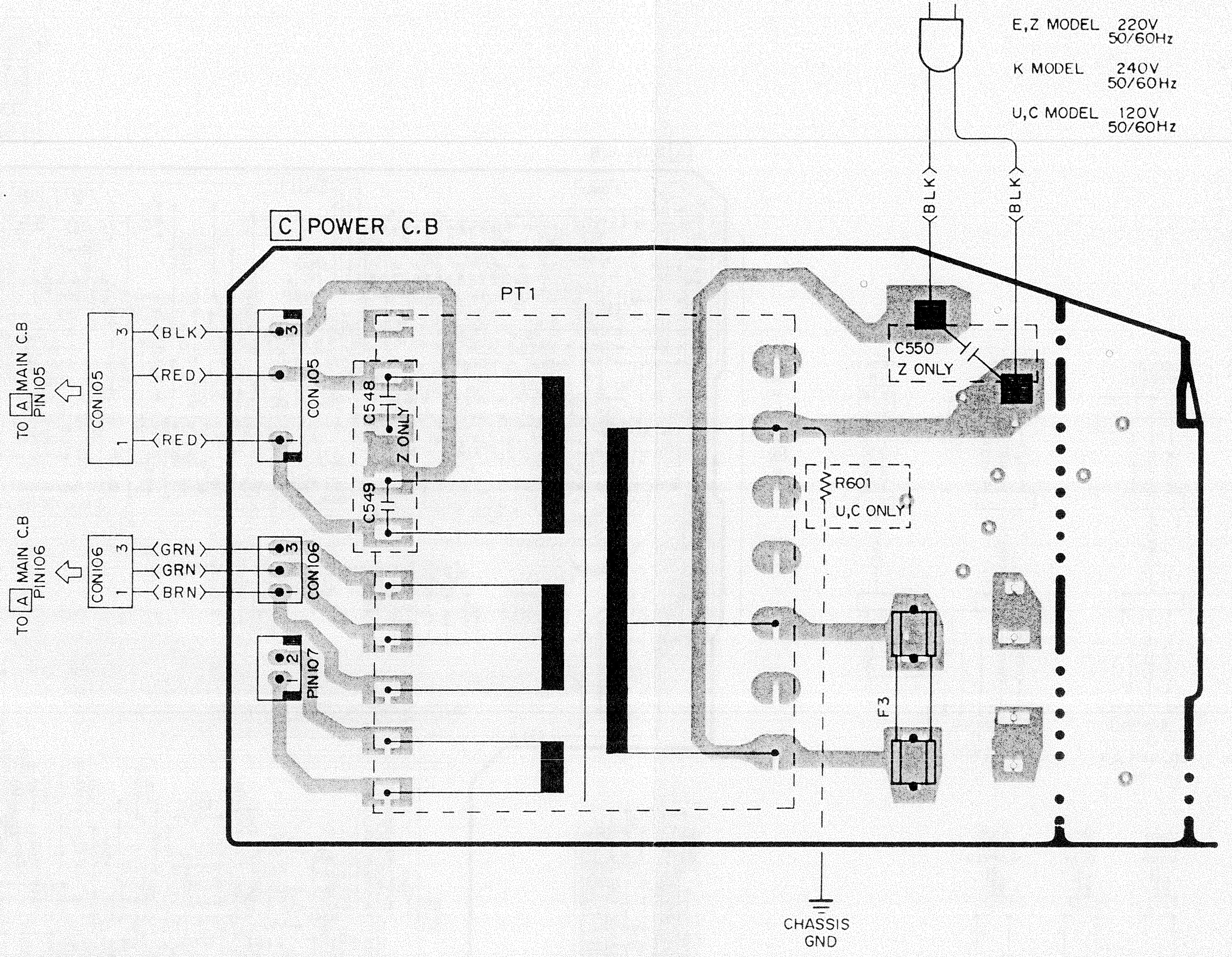
10. MPX VCO Adjustment
    Settings : • Test point : TP (VCO)
    • Adjustment location : SFR201
    Method : Connect a frequency counter to the test point via 10μF capacitor. Set to FM 98MHz and adjust so that the frequency at test point becomes 38kHz±50Hz.



WIRING－1



A MAIN C.B
⑧ ⑤ ⑥ ⑦ ② ③ ④ ⑨ ①
L151
L153
TC152
TC151
L102
L103
L104
L107
L101
TC102
TC103
L109
L106
TC101
⑪
L152
L154
TP (CLK)
L155
IC101
TP(DC)
TP (DC)
L108
TP (VT)
IC102
TP(VCO)
SFR201
IC103
TC251
PIN109
⑩
TEST PIN
3 GND
2 L CH
1 R CH
PIN110
SFR302
SFR301
IC302
⑭
SFR303
SFR304
⑯
L321
TP (Bias)
⑮
SFR305
SFR306
⑰
⑫
J105
SFR307



E,Z MODEL 220V 50/60Hz
K MODEL 240V 50/60Hz
U,C MODEL 120V 50/60Hz
BLK
BLK
C POWER C.B
PT1
C550 Z ONLY
TO A MAIN C.B PIN105
CON105
BLK
RED
RED
C548 Z ONLY
C549
R601 U,C ONLY
TO A MAIN C.B PIN106
CON106
GRN
GRN
BRN
PIN107
F3
CHASSIS GND

11. STEREO Distortion Adjustment
    Settings : · Test point : TEST PIN
    · FM MODE SW : STEREO
    · Adjustment location : L106
    Method : Adjust so that the distortion becomes minimum (less than 1.1%)

12. Normal Speed Adjustment (DECK-1, DECK-2)
    Settings : · Test tape : TTA-100 (TTA-111S)
    · Test point : TEST PIN
    · Adjustment location : SFR307
    Method : Play back the test tape, adjust for 3000Hz.

13. Head Azimuth Adjustment (DECK-1, DECK-2)
    Settings : · Test tape : TTS-310 (SCC-1429, TTA-317E)
    · Test point : TEST PIN
    · Adjustment location : Head azimuth adjustment screw
    Method : Play back the 10kHz signal of the test tape, and adjust so that the output becomes maximum.

14. PB Sensitivity Adjustment (DECK-2)
    Settings : · Test tape : TTS-200 (TCC-130, TTA-161)
    · Test point : TEST PIN ② (Lch)
    TEST PIN ① (Rch)
    · Dolby NR switch : OFF
    · Adjustment location : SFR301 (DECK-2, Lch)
    SFR302 (DECK-2, Rch)
    Method : Play back the test tape, and adjust so that the output becomes 385mV±0.5dB.

15. BIAS OSC Frequency Adjustment
    Settings : · Test tape : TTA-600 (TTA-119K)
    · Test point : TP (Bias)
    · OSC MODE SW : ●
    · Adjustment location : L321
    Method : Adjust so that the output frequency becomes 85kHz±1kHz.

16. REC/PB Sensitivity Adjustment (DECK-2)
    Settings Test tape : TTA-600 (TTA-119K)
    · Test point : TEST PIN ② (Lch)
    TEST PIN ① (Rch)
    · Dolby NR switch : OFF
    · GRAPHIC EQ.VOL. : CENTER
    · Adjustment location : SFR303 (DECK-2, Lch)
    SFR304 (DECK-2, Rch)
    Method : Set the DECK-2 in the REC mode and adjust ATT so that the 1kHz signal output is 270mV. Record the 1kHz signal, then play back the recorded tape, and adjust so that the output becomes 270mV±0.5dB.

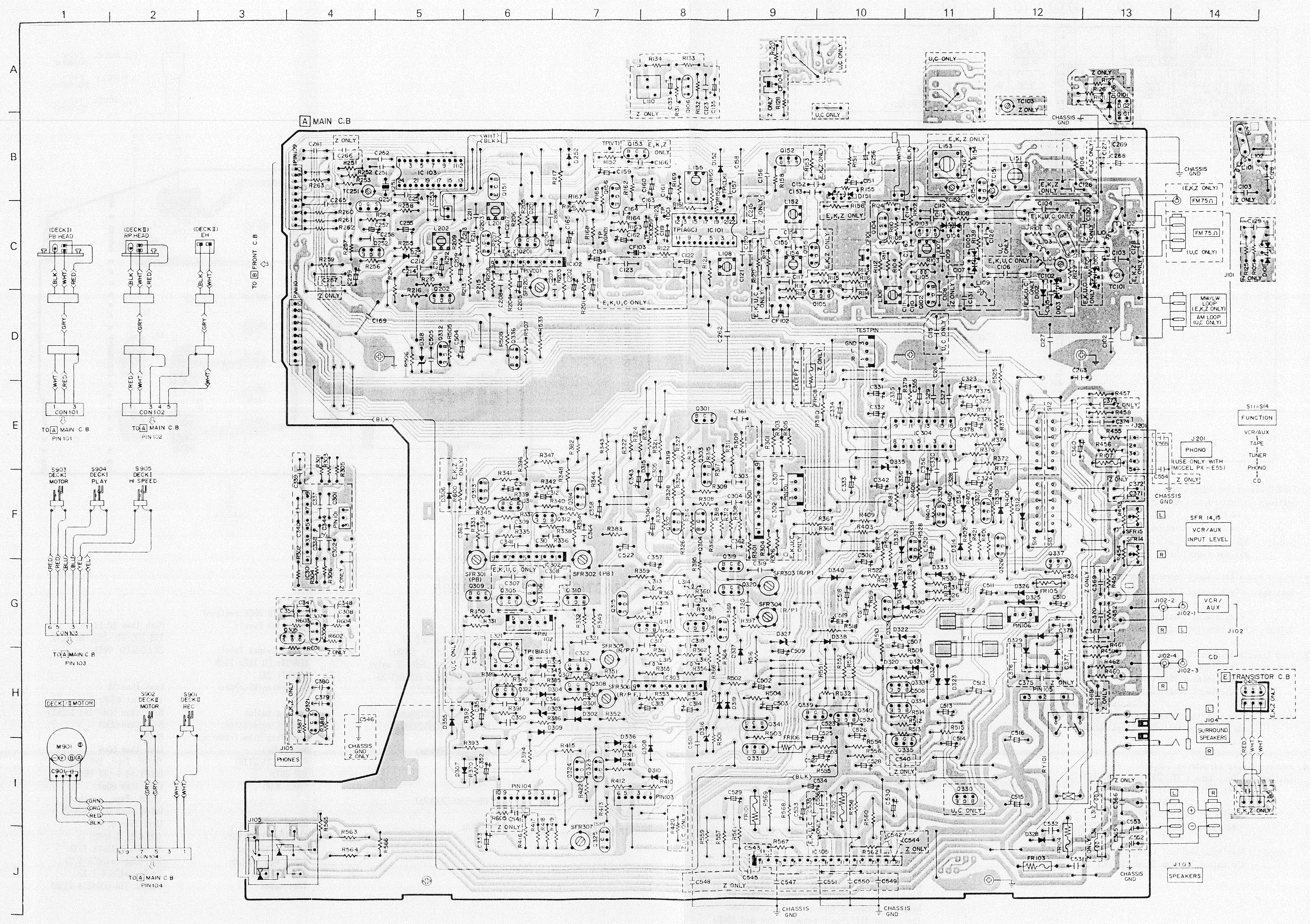
17. REC/PB Frequency Response Adjustment (DECK-2)
    Settings : · Test tape : TTA-600 (TTA-119K)
    · Test pint : TEST PIN ② (Lch)
    TEST PIN ① (Rch)
    · Dolby NR switch : OFF
    · GRAPHIC EQ.VOL. : CENTER
    · Adjustment location : SFR305 (Lch)
    SFR306 (Rch)
    Method : Set the DECK-2 in the REC mode and adjust ATT so that the 1kHz signal output is 270mV-20dB at TEST PIN L (TEST PIN R). Record the 1kHz and 10kHz signal, then play back the recorded tape and adjust so that the output difference between 1kHz and 10kHz becomes 0dB±0.5dB.

PRACTICAL SERVICE FIGURE

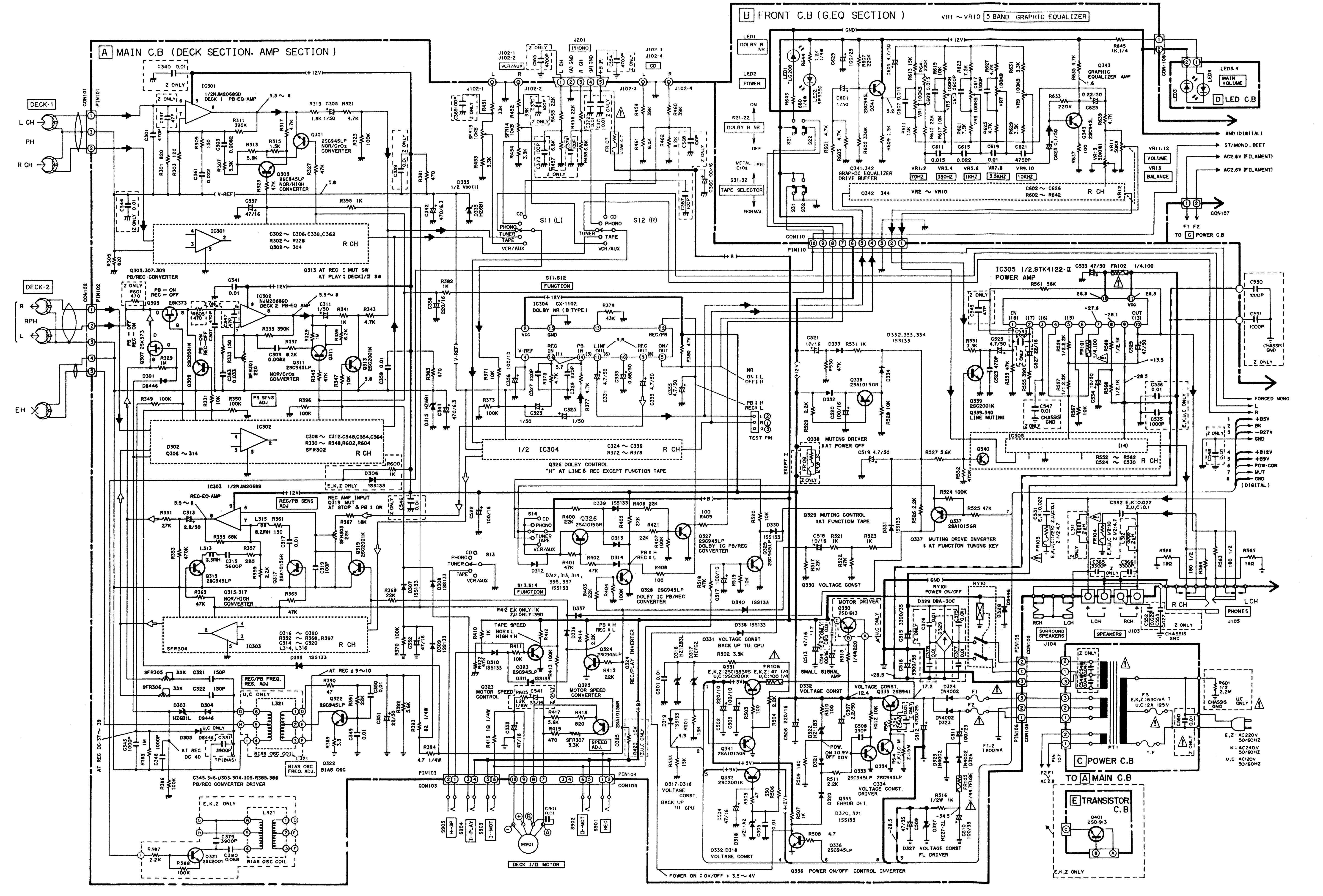
(TUNER section)	
<FM section>	
IHF Sensitivity:	-2~+8dB (EXCEPT Z)
	(THD 3%, 300Ω, 98MHz)
	7~15dB (S/N 26dB)(Z only)
S/N 50dB sensitivity:	30±6dB(98MHz) (EXCEPT Z)
S/N 46dB sensitivity:	35±6dB (Z only)
IF Frequency:	10.7MHz
Stereo Distortion:	Less than 1.2%(98MHz)
Stereo Separation:	More than 30dB(98MHz)
<LW section>	
Sensitivity:	63±4dB (200kHz)
(S/N 20dB)	
IF Frequency:	450kHz
<MW(AM) section>	
Sensitivity:	48~58dB(999kHz)
(S/N 20dB)	
IF Frequency:	450kHz

(CASSETTE DECK section)	
PB output level:	More than 10.5V
	TTS-200(TTC-130, SP OUT)
REC/PB output level:	2V±2dB(SP OUT)
(INPUT: CD 1kHz-10dB	
OUTPUT: 2V)	
Distortion(REC/PB):	Less than 3%
	(NORM at 400Hz.)
Erasing ratio:	More than 60dB (at 125Hz)
Channel separation:	More than 35dB
Recording bias frequency:	85kHz
Noise(PB):	Less than 60mV
(DUMMY CASSETTE)	(NORM. Tape, Unweighted
(SP OUT)	DOLBY-NR B OFF DECK-1)
(VOL: MAX)	Less than 80mV.
	(NORM. Tape, weighted
	DOLBY-NR B OFF DECK-2)
Wow & flutter:	Less than 0.30%
TTA-100(TTA-111S)	(DECK-1, 2 WRMS)
Take-up torque:	30~60g-cm(DECK-1,2)
F.F & REW torque:	55~135g-cm(DECK-1,2)
Back tension:	2~5g-cm(DECK-1,2)
Test tape:	NORMAL TTA-600(TTA-119K)

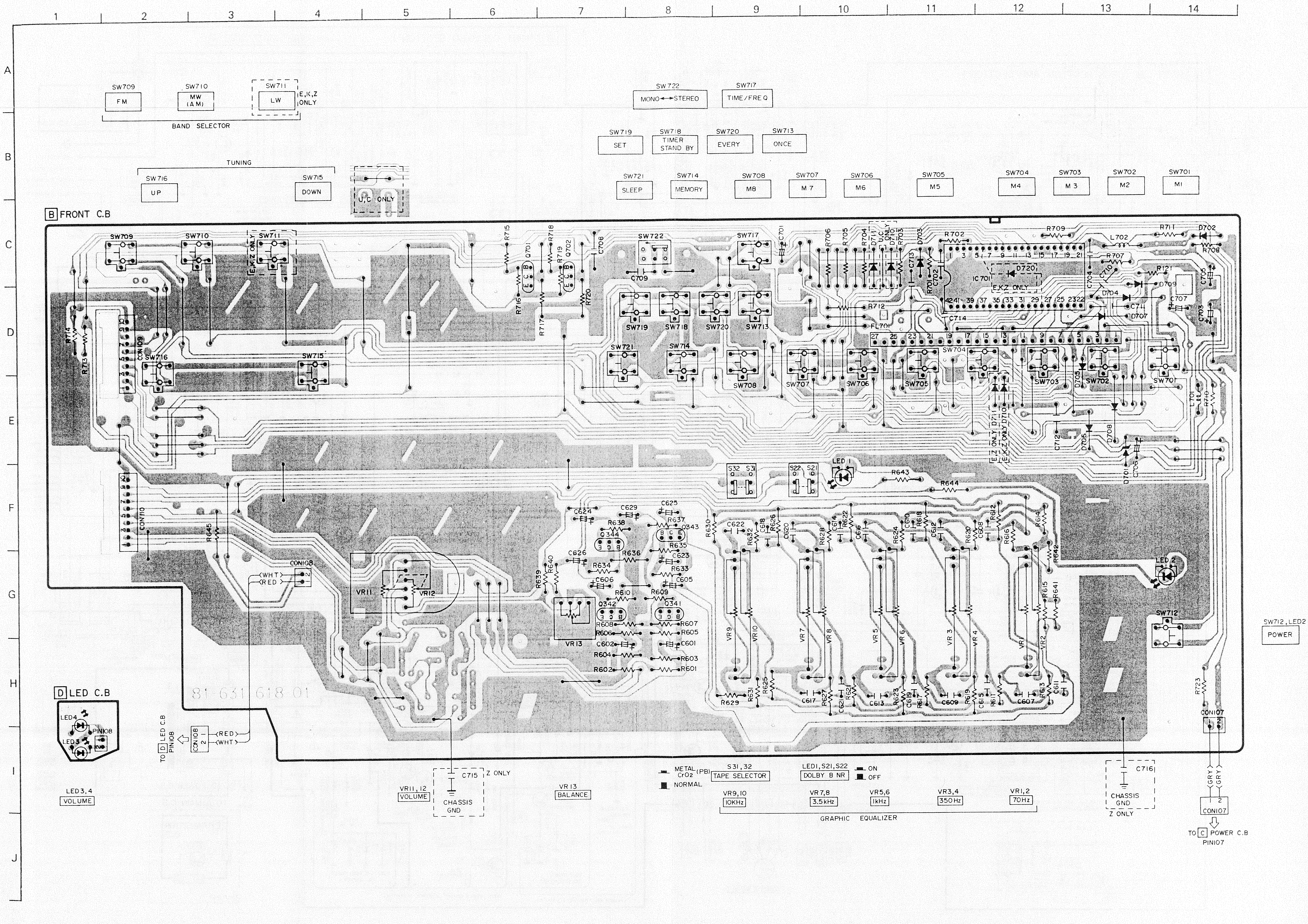
WIRING—2


1
2
3
4
5
6
7
8
9
10
11
12
13
14
A
B
C
D
E
F
G
H
I
J
A MAIN C.B
TO B FRONT C.B
(DECK I) PB HEAD
(DECK II) RP HEAD
(DECK II) EH
CON101
TO A MAIN C.B PIN101
CON102
TO A MAIN C.B PIN102
S903 DECK I MOTOR
S904 DECK I PLAY
S905 DECK I HI SPEED
CON103
TO A MAIN C.B PIN103
DECK I/II MOTOR
M901
C901
S902 DECK II MOTOR
S901 DECK II REC
CON104
TO A MAIN C.B PIN104
J105
PHONES
C546
CHASSIS GND Z ONLY
IC101
IC102
IC103
IC104
IC105
IC301
IC302
IC303
IC304
TP(VCO)
TP(AGC)
TP(BIAS)
TESTPIN
SFR301 (PB)
SFR302 (PB)
SFR303 (R/P)
SFR304 (R/P)
SFR305 (R/P F)
SFR306 (R/P F)
SFR307 (SP)
E,K,U,C ONLY
E,K,Z ONLY
U,C ONLY
Z ONLY
EXCEPT Z
CHASSIS GND
(E,K,Z ONLY) FM75Ω
FM75Ω (U,C ONLY)
J101
MW/LW LOOP (E,K,Z ONLY)
AM LOOP (U,C ONLY)
S11-S14 FUNCTION
VCR/AUX
TAPE
TUNER
PHONO
CD
J201
PHONO
(USE ONLY WITH MODEL PX-E55)
Z ONLY
SFR 14,15
VCR/AUX INPUT LEVEL
J102-2
J102-1
VCR/AUX
J102
J102-4
J102-3
CD
E TRANSISTOR C.B
Q401
J104
SURROUND SPEAKERS
J103
SPEAKERS
RY101
F1
F2
L
R

SCHEMATIC DIAGRAM－1


A MAIN C.B (DECK SECTION, AMP SECTION)
B FRONT C.B (G.EQ SECTION)
VR1 ～ VR10 5 BAND GRAPHIC EQUALIZER
C POWER C.B
D LED C.B
E TRANSISTOR C.B
TO A MAIN C.B
DECK-1
DECK-2
L CH
PH
R CH
RPH
EH
IC301 1/2NJM2068SD DECK 1 PB-EQ-AMP
IC302 NJM2068SD DECK 2 PB-EQ AMP
IC303 1/2NJM2068S
REC-EQ-AMP
IC304 CX-1102 DOLBY NR (B TYPE)
1/2 IC304
IC305 1/2.STK4122-II POWER AMP
Q301 2SC945LP NOR/CrO2 CONVERTER
Q303 2SC945LP NOR/HIGH CONVERTER
Q305.307.309 PB/REC CONVERTER
Q311 2SC945LP NOR/CrO2 CONVERTER
Q313 AT REC : MUT SW AT PLAY : DECKI/II SW
Q315 2SC945LP
Q315.317 NOR/HIGH CONVERTER
Q319 MUT AT STOP & PB : ON
REC AMP INPUT
Q321 2SC2001
BIAS OSC COIL
Q322 BIAS OSC
Q323 MOTOR SPEED CONTROL
Q325 MOTOR SPEED CONVERTER
Q326 DOLBY CONTROL "H" AT LINE & REC EXCEPT FUNCTION TAPE
Q327 2SC945LP DOLBY IC PB/REC CONVERTER
Q328 2SC945LP DOLBY IC PB/REC CONVERTER
Q329 MUTING CONTROL AT FUNCTION TAPE
Q330 VOLTAGE CONST
Q330 2SD1913 MOTOR DRIVER
Q331 VOLTAGE CONST BACK UP TU. CPU
Q332 VOLTAGE CONST
Q332.D318 VOLTAGE CONST
Q333 ERROR DET.
Q334 VOLTAGE CONST. DRIVER
Q335 2SB941 VOLTAGE CONST.
Q336 POWER ON/OFF CONTROL INVERTER
POWER ON : 0V/OFF : 3.5～4V
Q337 MUTING DRIVE INVERTER AT FUNCTION TUNING KEY
Q338 MUTING DRIVER AT POWER OFF
Q339.340 LINE MUTING
Q341.342 GRAPHIC EQUALIZER DRIVE BUFFER
Q343 GRAPHIC EQUALIZER AMP
D317.D316 VOLTAGE CONST. BACK UP TU CPU
D327 VOLTAGE CONST FL DRIVER
SMALL SIGNAL AMP
S11 (L)
S12 (R)
S11.S12 FUNCTION
S13.S14 FUNCTION
S21.22 DOLBY B NR
S31.32 TAPE SELECTOR
PHONO
TUNER
TAPE
VCR/AUX
CD
J201 PHONO
J102-1 J102-2 VCR/AUX
J102-3 J102-4 CD
RY101 POWER ON/OFF
SURROUND SPEAKERS J104
SPEAKERS J103
PHONES J105
VR1.2 70HZ
VR3.4 330HZ
VR5.6 1KHZ
VR7.8 3.3KHZ
VR9.10 10KHZ
VR11.12 VOLUME
VR13 BALANCE
LED1 DOLBY B NR
LED2 POWER
LED3.4 MAIN VOLUME
GND (DIGITAL)
ST/MONO, BEET
AC2.6V (FILAMENT)
FORCED MONO
+B5V
-B27V
+B12V
+B9V
POW-CON
MUT
M901
DECK I/II MOTOR
S903 H-SP
S904 I-PLAY
S905 I-MOT
S902 II-MOT
S901 REC
T.F
PT1
E,Z: AC220V 50/60HZ
K: AC240V 50/60HZ
U,C: AC120V 50/60HZ
F3 E,K,Z: 630mA T U,C: 2A 125V
Q401 2SD1913
E,K,Z ONLY
Z ONLY
TEST PIN
PB SENS ADJ
REC/PB SENS ADJ
REC/PB FREQ. RES. ADJ
BIAS OSC FREQ. ADJ.
SPEED ADJ.
TAPE SPEED NOR : L HIGH : H
C345.346.U303.304.305.R385.386 PB/REC CONVERTER DRIVER

WIRING—3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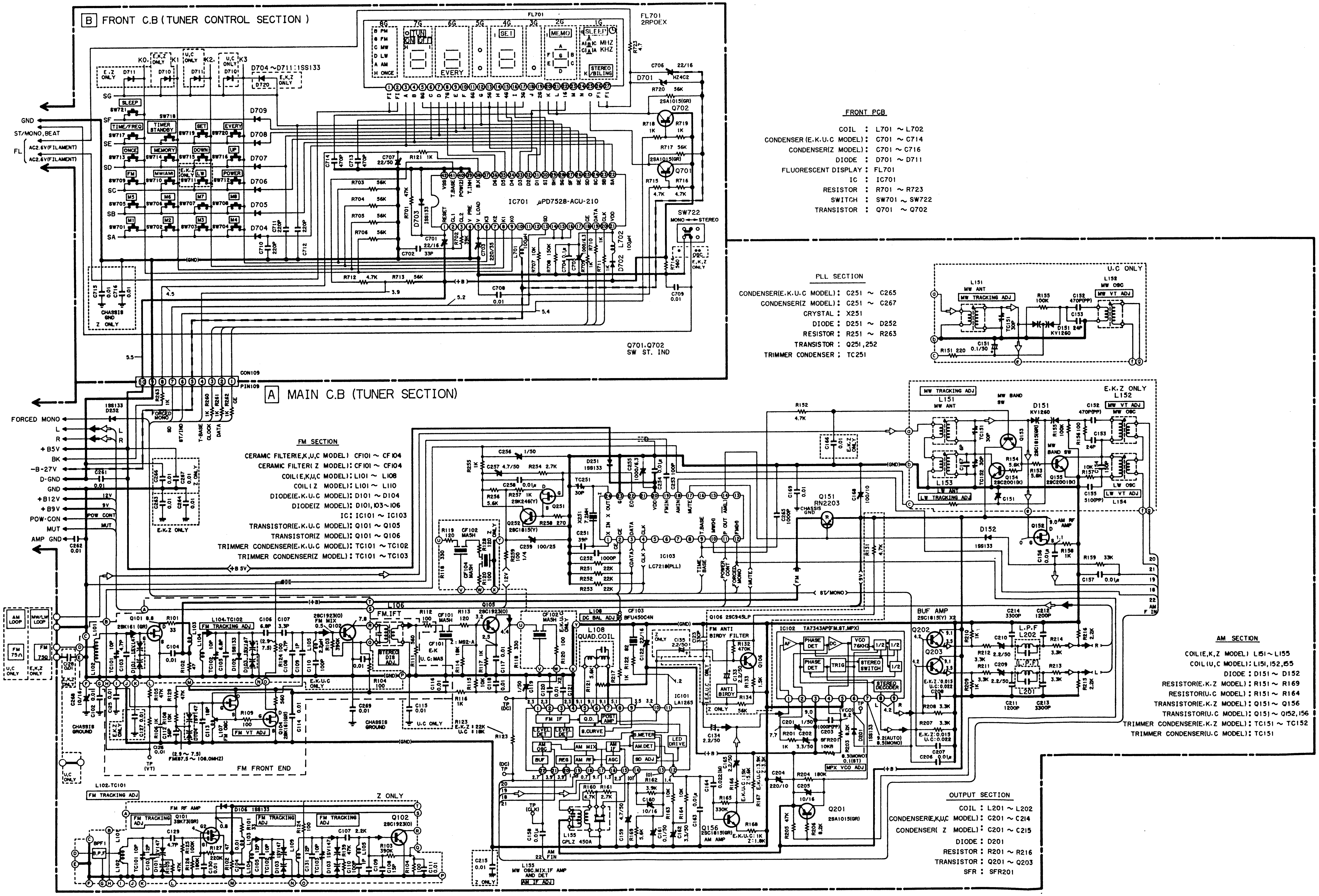
G
H
I
J
SW709
FM
SW710
MW (AM)
SW711
LW
E,K,Z ONLY
BAND SELECTOR
SW722
MONO ←→ STEREO
SW717
TIME/FREQ
SW719
SET
SW718
TIMER STAND BY
SW720
EVERY
SW713
ONCE
TUNING
SW716
UP
SW715
DOWN
U,C ONLY
SW721
SLEEP
SW714
MEMORY
SW708
M8
SW707
M 7
SW706
M6
SW705
M5
SW704
M4
SW703
M 3
SW702
M2
SW701
M1
B FRONT C.B
CON109
CON110
CON108
WHT
RED
VR11
VR12
VR13
IC701
E,K,Z ONLY
FL701
LED 1
LED 2
SW712
CON107
81 631 618 01
D LED C.B
LED4
LED3
PIN108
TO D LED C.B PIN108
CON108
SW712, LED2
POWER
LED3, 4
VOLUME
VR11, 12
VOLUME
C715
Z ONLY
CHASSIS GND
VR13
BALANCE
METAL CrO2 (PB)
NORMAL
S31, 32
TAPE SELECTOR
LED1, S21, S22
DOLBY B NR
ON
OFF
VR9, 10
10KHz
VR7, 8
3.5kHz
VR5, 6
1kHz
VR3, 4
350Hz
VR1, 2
70Hz
GRAPHIC EQUALIZER
C716
CHASSIS GND
Z ONLY
GRY
CON107
TO C POWER C.B PIN107

SCHEMATIC DIAGRAM－2


B FRONT C.B (TUNER CONTROL SECTION)
A MAIN C.B (TUNER SECTION)
FL701 2RPOEX
IC701 μPD7528-ACU-210
IC101 LA1265
IC102 TA7343AP(FM.ST.MPX)
IC103 LC7218(PLL)
CON109
PIN109
GND
ST/MONO,BEAT
FL AC2.6V(FILAMENT)
FORCED MONO
L
R
+B5V
BK
-B-27V
D-GND
+B12V
+B9V
POW-CON
MUT
AMP GND
FM FRONT END
FM MIX
FM.IFT
L106
L108 QUAD.COIL
FM ANTI BIRDY FILTER
BUF AMP
L.P.F
MW OSC.MIX.IF AMP AND DET
AM IF ADJ
FM RF AMP
Z ONLY
U.C ONLY
E.K.Z ONLY
MW TRACKING ADJ
MW VT ADJ
LW TRACKING ADJ
LW VT ADJ
FM TRACKING ADJ
FM VT ADJ
STEREO DET ADJ
MPX VCO ADJ
DC BAL ADJ
SW722 MONO↔STEREO
Q701,Q702 SW ST. IND
CHASSIS GROUND

FRONT PCB

COIL : L701 ～L702
CONDENSER (E.K.U.C MODEL) : C701 ～C714
CONDENSER(Z MODEL) : C701 ～C716
DIODE : D701 ～D711
FLUORESCENT DISPLAY : FL701
IC : IC701
RESISTOR : R701 ～R723
SWITCH : SW701 ～ SW722
TRANSISTOR : Q701 ～Q702

PLL SECTION

CONDENSER(E.K.U.C MODEL) : C251 ～ C265
CONDENSER(Z MODEL) : C251 ～ C267
CRYSTAL : X251
DIODE : D251 ～ D252
RESISTOR : R251 ～ R263
TRANSISTOR : Q251,252
TRIMMER CONDENSER ; TC251

FM SECTION

CERAMIC FILTER(E,K,U,C MODEL) CF101 ～ CF104
CERAMIC FILTER(Z MODEL) : CF101 ～ CF104
COIL(E,K,U,C MODEL) : L101 ～ L108
COIL(Z MODEL) : L101 ～ L110
DIODE(E.K.U.C MODEL) : D101 ～D104
DIODE(Z MODEL) : D101, 103～106
IC : IC101 ～ IC103
TRANSISTOR(E.K.U.C MODEL) : Q101 ～ Q105
TRANSISTOR(Z MODEL) : Q101 ～ Q106
TRIMMER CONDENSER(E.K.U.C MODEL) : TC101 ～TC102
TRIMMER CONDENSER(Z MODEL) : TC101 ～TC103

AM SECTION

COIL(E,K,Z MODEL) L151～L155
COIL(U,C MODEL) : L151, 152, 155
DIODE : D151 ～ D152
RESISTOR(E.K.Z MODEL) : R151 ～ R169
RESISTOR(U.C MODEL) : R151 ～ R164
TRANSISTOR(E.K.Z MODEL) : Q151 ～ Q156
TRANSISTOR(U.C MODEL) : Q151 ～ Q152, 156
TRIMMER CONDENSER(E.K.Z MODEL) : TC151 ～ TC152
TRIMMER CONDENSER(U.C MODEL) : TC151

OUTPUT SECTION

COIL : L201 ～ L202
CONDENSER(E,K,U,C MODEL) : C201 ～ C214
CONDENSER(Z MODEL) : C201 ～ C215
DIODE : D201
RESISTOR : R201 ～ R216
TRANSISTOR : Q201 ～ Q203
SFR : SFR201

IC DESCRIPTION

1. IC, μPD7528ACU−204 (-210)

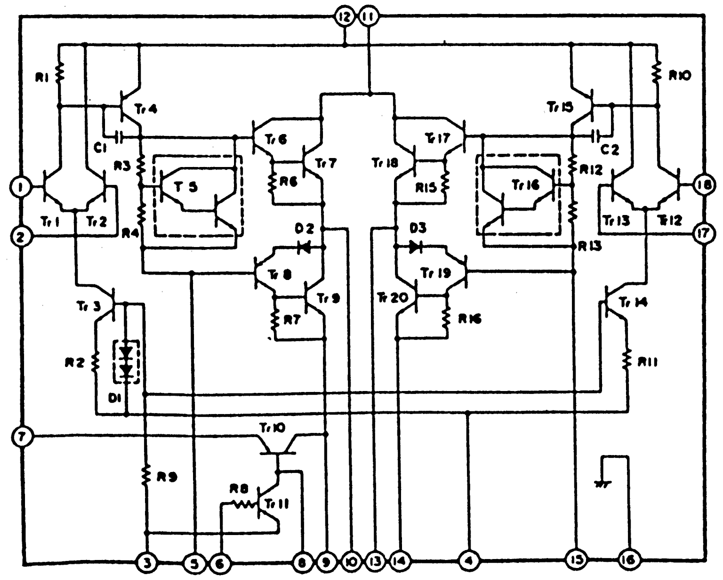
Pin No.	Pin name	Description
1	RESET	Reset input. The "H" pulse resets the microprocessor.
2	CL1	Clock oscillation pins of the microprocessor. (approx. 400Hz)
3	CL2	
4	V PRE	Negative power supply for the output predriver. Connected to GND.
5	V ROAD	Negative power supply for the output driver load resistor.
6	K3	Key matrix inputs
7	K2	
8	K1	
9	K0	
10	EVERY	"H" during TIMER ON
11	ONCE	
12	———	———
13	SD	Auto stop signal input. The unit stops at "L" level.
14	A	Remote control inputs supplied from M50761-433S.
15	B	
16	C	
17	———	———
18	CE	Outputs a signal momentarily when any key is operated, supplied to LC7217.
19	DATA	
20	CLK	
21	V_{DD}	Power supply pin, 5V±10%
22	Sa	Frequency display and clock time segment outputs and key matrix outputs. Active "H"
23	Sb	
24	Sc	
25	Sd	
26	Se	
27	Sf	
28	Sg	
29	Sh	
30	Si	
31	D3	Frequency display and clock time digit signal outputs Active "H"
32	D2	
33	D1	
34	D4	
35	D5	
36	D6	
37	———	———
38	P BRK	Power failure detection input. The unit enters the backup mode at "L".
39	T INH	Connected to GND
40	———	———
41	T BASE	8Hz input supplied from LC7217 for the reference clock.
42	Vss	GND pin

2. IC, LC7217 (LC7218)

Pin No.	Pin name	Description
1 24	X IN X OUT	Clock oscillation pins. 7.2MHz crystal is connected to these pins.
2 3 4	CE DATA CLK	When any key is operated, a signal is supplied from the CPU. Active "H".
5 8	———	Set open
9	T. BASE	8Hz output supplied to the CPU for the reference clock.
10	———	———
11	POW CONT	Power control output. Outputs "H" during power ON.
12	FM H	Outputs "H" when an FM broadcast is being received.
13	———	———
14	AM H	Outputs "H" when an AM broadcast is being received.
15 16	———	Open.
17	MUTE	Outputs "L" momentarily when a key is operated. Goes "L" during power OFF(active "L")
18	AM IN	AM local oscillation input.
19	FM IN	FM local oscillation input.
20	V_{DD}	Power supply, 5V±10%
21	E_0	PLL error output
22	———	Open
23	Vss	GND

IC BLOCK DIAGRAM

IC,STK4122−2


12
11
R1
Tr4
C1
R3
T5
R6
Tr6
Tr7
Tr18
Tr17
R15
Tr16
R12
C2
Tr15
R10
1
2
Tr1
Tr2
R4
D2
D3
Tr13
Tr12
R13
18
17
Tr3
Tr8
Tr9
R7
Tr19
Tr20
R16
Tr14
R2
D1
R11
7
Tr10
R9
R8
Tr11
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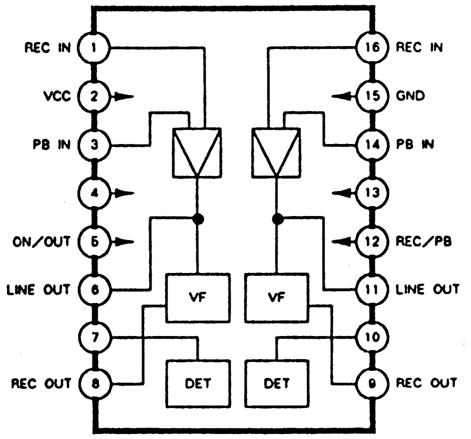
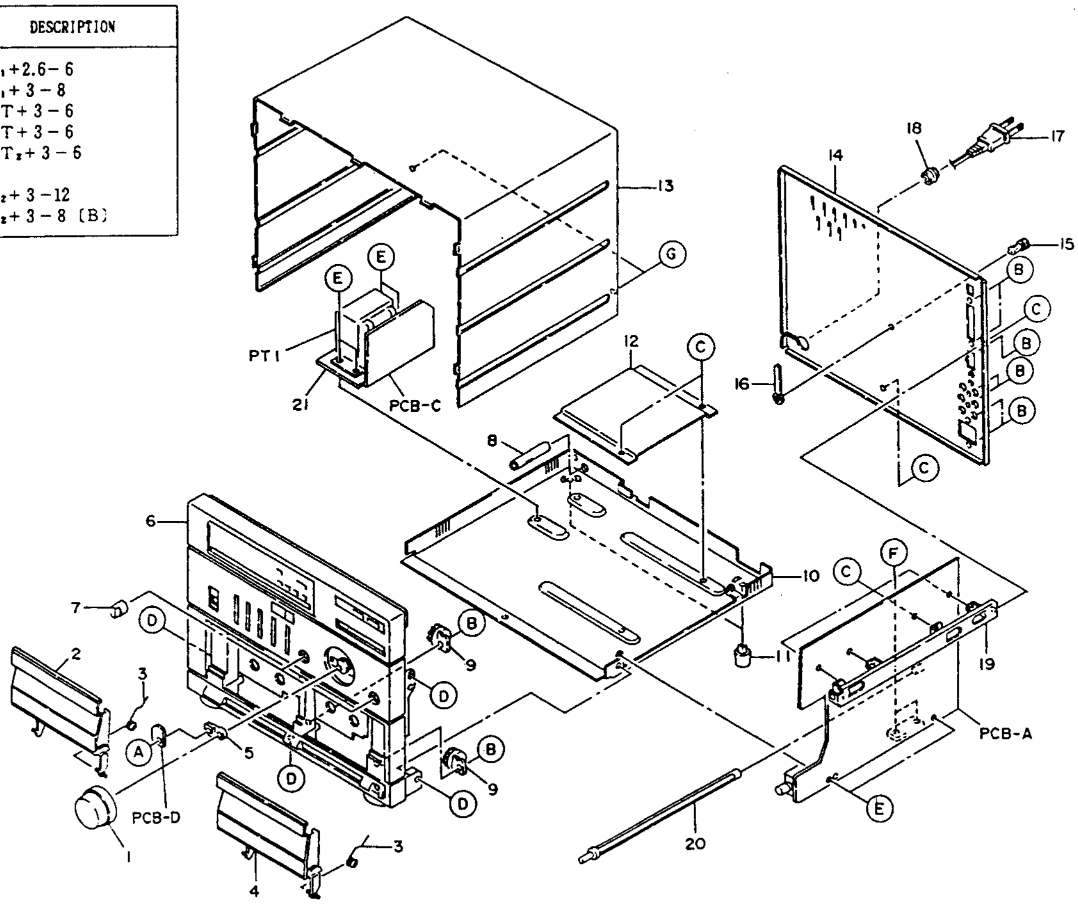
14
4
15
16

IC,CXA1102


REC IN
1
VCC
2
PB IN
3
4
ON/OUT
5
LINE OUT
6
7
REC OUT
8
16
REC IN
15
GND
14
PB IN
13
12
REC/PB
11
LINE OUT
10
9
REC OUT
VF
VF
DET
DET

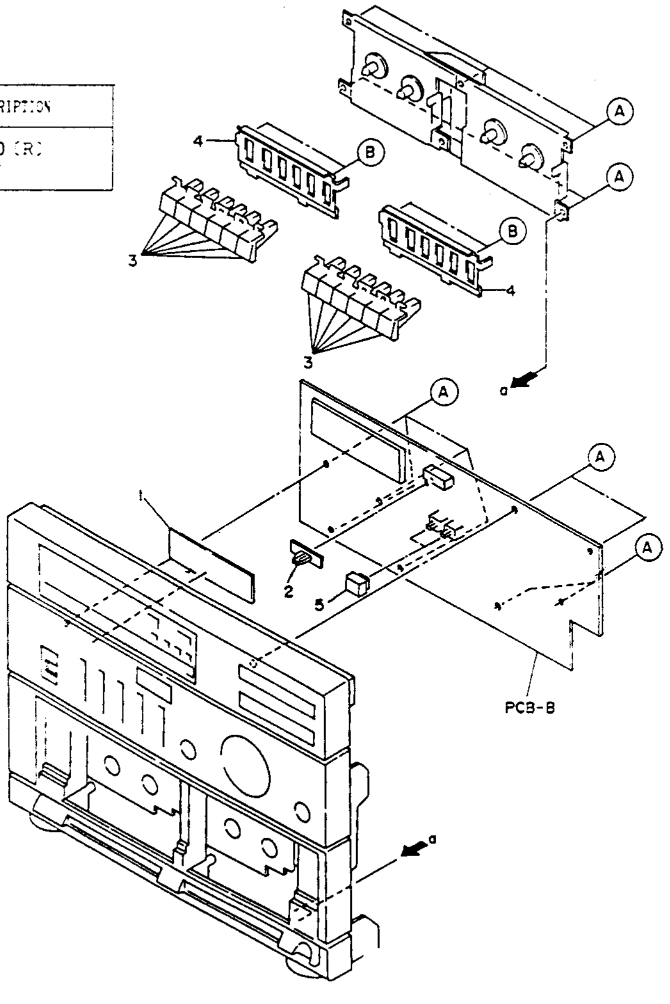
EXPLODED VIEW－1

REF.NO.	PART NO.	DESCRIPTION
A	87-353-073-21	VT_1+2.6－6
B	87-351-095-21	VT_1+3－8
C	87-081-511-01	VTT+3－6
D	87-081-531-01	QTT+3－6
E	87-512-094-21	VFT_2+3－6
F	87-342-097-21	UT_2+3－12
G	87-347-095-01	UT_2+3－8 〔B〕


18
17
14
15
13
G
B
C
B
B
B
E
E
PT1
21
PCB-C
12
C
16
8
C
6
10
F
C
7
D
B
9
D
11
19
2
3
A
5
D
B
9
D
PCB-A
PCB-D
1
E
20
3
4

EXPLODED VIEW－2

REF.NO.	PART NO.	DESCRIPTION
A	87-356-096-21	VT_1+3－10 〔R〕
B	87-351-095-21	VT_1+3－8


A
4
B
A
B
3
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a
A
A
1
A
2
5
PCB-B
a

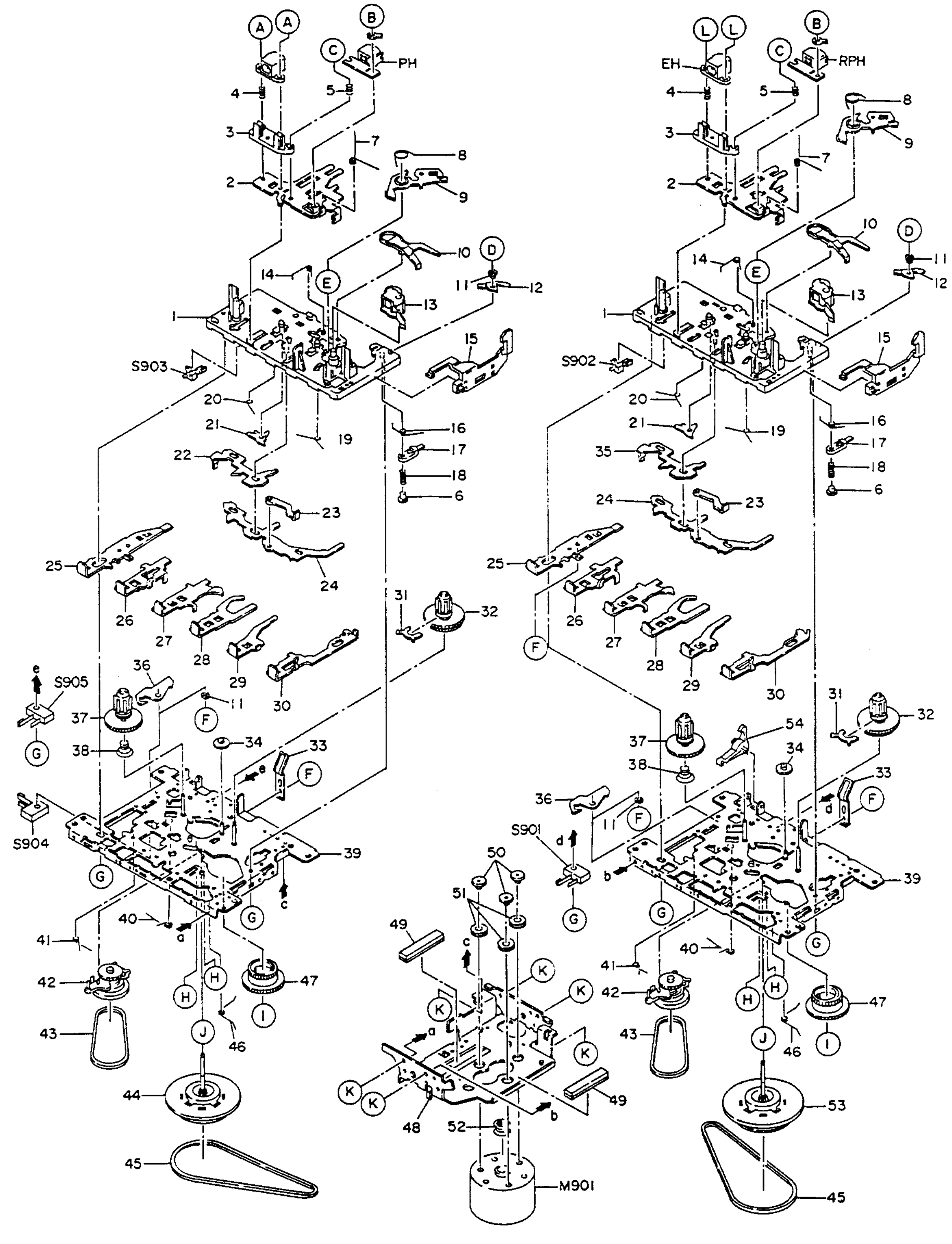
MECHANICAL PARTS LIST

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q'TY
	1-1	★09-047-361-010	KNOB VOLUME ASSY	※	1
	1-2	09-047-369-010	CASSETTE BOX L ASSY	※	1
	1-3	★81-631-209-019	T-SPRING, EJECT 2	※	2
	1-4	09-047-370-010	CASSETTE BOX R ASSY	※	1
	1-5	★81-631-206-019	HOLDER, LED, VOLUME 2	※	1
	1-6	★09-047-350-010	FRONT CABINET ASSY (H, HJ, G ONLY)	※	1
	1-6	★09-047-368-010	FRONT CABINET ASSY (U, C ONLY)	※	1
	1-6	★09-047-351-010	FRONT CABINET ASSY (E, K, Z ONLY)	※	1
	1-7	★81-626-020-019	KNOB, BALANCE		2
	1-8	★87-839-709-019	UL TUBE 7 DIA		1
	1-9	★87-063-143-010	OIL-DAMP		2
	1-10	---	CHASSIS, AMP.		1
	1-11	★82-132-010-010	FOOT		2
	1-12	---	HEAT SINK, M2		1
	1-13	★81-631-003-010	CABINET, STEEL (EXCEPT E, K, Z)	※	1
	1-13	★81-631-036-018	CABINET, STEEL (E, K, Z ONLY)	※	1
	1-14	★81-631-002-010	PANEL, REAR (H ONLY)	※	1
	1-14	★81-631-040-010	PANEL, REAR (HJ ONLY)	※	1
	1-14	★81-631-026-010	PANEL, REAR (U ONLY)	※	1
	1-14	★81-631-032-010	PANEL, REAR (C ONLY)	※	1
	1-14	★81-631-027-010	PANEL, REAR (ENE ONLY)	※	1
	1-14	★81-631-056-010	PANEL, REAR (EN ONLY)	※	1
	1-14	★81-631-031-010	PANEL, REAR (K ONLY)	※	1
	1-14	★81-631-033-010	PANEL, REAR (G ONLY)	※	1
	1-14	★81-631-034-010	PANEL, REAR (Z ONLY)	※	1
	1-15	★87-084-077-019	NYLON RIVET 3.5-4.5		1
	1-16	---	WIRE BINDER		1
	1-17	★87-034-732-010	AC CORD (H, HJ ONLY)		1
	1-17	★87-034-731-010	AC CORD (U, C ONLY)		1
	1-17	★87-034-736-010	AC CORD (E, Z ONLY)		1
	1-17	★87-034-975-018	AC CORD (K ONLY)		1
	1-17	★87-034-735-010	AC CORD (G ONLY)		1
	1-18	★87-085-184-010	AC CORD BUSHING (H, HJ ONLY)		1
	1-18	★87-085-189-010	AC CORD BUSHING (U, C ONLY)		1
	1-18	★87-085-185-010	AC CORD BUSHING (E, K, G, Z ONLY)		1
	1-19	★81-631-202-019	HOLDER, P. C. B	※	1
	1-20	★81-631-208-019	ROD, FUNCTION	※	1
	1-21	★81-631-661-019	SHIELD PLATE	※	1

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q'TY
	2-1	★81-631-652-019	SHIELD SHEET	※	1
	2-2	★81-783-016-119	KNOB, SLIDE		1
	2-3	★81-629-007-119	PUSH-KEY, (1)		12
	2-4	★81-631-205-019	HOLDER, PUSH-KEY	※	2
	2-5	★81-626-016-019	PUSH-BUTTON, SUR	CX-78	2

EXPLODED VIEW—3

REF.NO.	PART NO.	DESCRIPTION
A	S9-821-000-00	⊕⊖ CAP SCREW M2x8
B	S9-115-000-00	BIND SCREW
C	S9-922-000-00	AZIMUTH M2x7
D	S9-999-200-18	P TAPPING M2x3.5
E	S9-999-030-13	PW 1.4x3.8x0.5(CUT)
F	S9-179-000-00	C TAPPING M2x3
G	S9-679-000-00	P TAPPING M2x5
H	S9-999-180-09	TAPPING M2x4.5
I	S9-422-000-00	PW 1.2x3.8x0.3(CUT)
J	S9-786-000-00	PW 2x3.5x0.3
K	S9-180-000-00	C TAPPING M2x4
L	S9-223-000-00	⊕⊖ CAP SCREW M2x7.5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PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q'TY
	3-1	★S1-921-143-010	BASE ASSY		2
	3-2	★S1-921-030-020	HEAD PANEL		2
	3-3	★S1-921-030-060	HEAD BASE		2
	3-4	★S1-821-030-080	EH SPRING		2
	3-5	★S1-821-030-070	AZIMUTH SPRING		2
	3-6	★S1-921-140-110	PAUSE STOPPER		2
	3-7	★S1-921-030-090	P-SPRING, PANEL		2
	3-8	★S1-921-260-050	GEAR PLATE SPRING		2
	3-9	S1-921-265-010	GEAR PLATE ASSY		2
	3-10	★S1-921-260-040	SENSING LEVER		2
	3-11	★S1-921-140-370	P ARM COLLAR		4
	3-12	★S1-921-140-340	P ARM		2
	3-13	S1-921-043-010	PINCH ROLLER ARM ASSY		2
	3-14	★S1-921-140-180	M CONTROL SPRING		2
	3-15	★S1-921-130-020	EJECT SLIDE LEVER		2
	3-16	★S1-921-140-130	P CONTROL SPRING		2
	3-17	★S1-921-141-0A0	PAUSE LEVER		2
	3-18	★S1-921-140-120	PAUSE LEVER SPRING		2
	3-19	★S1-921-140-150	BUTTON LEVER SPRING (B)		2
	3-20	★S1-921-140-140	BUTTON LEVER SPRING (A)		2
	3-21	★S1-921-140-200	PR STOPPER		2
	3-22	★S1-921-140-400	SWITCH ACTUATOR		1
	3-23	★S1-821-011-590	E KICK LEVER		2
	3-24	★S1-921-140-380	PUCH-BUTTON ACTUATOR		2
	3-25	★S1-921-140-220	REC BUTTON LEVER		2
	3-26	★S1-921-140-230	PLAY BUTTON LEVER		2
	3-27	★S1-921-140-240	REW BUTTON LEVER		2
	3-28	★S1-921-140-250	FF BUTTON LEVER		2
	3-29	★S1-921-140-260	STOP BUTTON LEVER		2
	3-30	★S1-921-140-270	PAUSE BUTTON LEVER		2
	3-31	★S1-921-050-060	SENSOR		2
	3-32	S1-921-053-010	TAKE-UP REEL ASSY		2
	3-33	★S1-821-100-990	PACK SPRING		2
	3-34	S1-821-100-700	FF GEAR		2
	3-35	★S1-921-140-080	SWITCH ACTUATOR		1
	3-36	★S1-921-020-010	REC ARM		2
	3-37	S1-921-053-020	SUPPLY REEL ASSY		2
	3-38	★S1-829-100-100	BACK TENSION SPRING		2
	3-39	★S1-921-015-010	CHASSIS ASSY		2
	3-40	★S1-921-140-210	REC BUTTON LEVER SPRING		2
	3-41	★S1-921-140-170	P.S LEVER SPRING		2
	3-42	S1-921-073-020	RF CLUTCH ASSY		2
	3-43	S1-921-070-030	RF BELT		2
	3-44	S1-921-093-050	FLYWHEEL ASSY		1
	3-45	S1-821-122-200	MAIN BELT		2
	3-46	★S1-921-140-160	E ACTUATOR SPRING		2
	3-47	S1-921-260-020	CAM GEAR		2
	3-48	★S1-921-120-110	MOTOR BRACKET		1
	3-49	★S1-921-120-120	ANTI VIBRATION FELT MAT		2
	3-50	★S1-821-120-020	MOTOR COLLAR SCREW		3
	3-51	★S1-820-130-060	MOTOR RUBBER		3
	3-52	★S1-921-120-130	MOTOR PULLEY		1
	3-53	S1-921-093-060	FLYWHEEL ASSY		1
	3-54	★S1-821-100-690	RECORD SAFETY LEVER		1

■SPEAKER LIST (SX−S55,S55A)

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q'TY
	1	★81-106-019-010	GRILL FRAME ASSY (55)		1
	2	★81-106-020-010	GRILL FRAME ASSY (55A)		1
	3	★83-106-021-010	PANEL, WOOFER G		1
	4	★83-106-022-010	PANEL, TWEETER G		1
	5	★83-106-023-010	PANEL, DUCT G		1
	6	83-106-601-010	WOOFER, SPEAKER		1
	7	83-106-603-010	TWEETER, SPEAKER		1
	8	★83-096-614-010	CORD, SPEAKER		1
	9	★87-010-007-010	CAP, ELECT 3.3μF		1

■ACCESSORIES／PACKAGE LIST

X−55 (H, HJ, U, C, K, G)

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q'TY
	1	★81-634-904-019	INSTRUCTION BOOKLET (H) (H, HJ, G ONLY)	※	1
	2	★81-634-915-018	INSTRUCTION BOOKLET (E) (K ONLY)	※	
	3	★81-634-916-019	INSTRUCTION BOOKLET (E) (U, C ONLY)	※	1
	4	★81-631-647-010	AM LOOP ANT (S) NC (U, C, K ONLY)		1
	5	★81-748-632-010	FM FEEDER ANT M (H, HJ, U, C, G ONLY)		1
	6	★87-043-097-010	FM FEEDER ANT (F) (K ONLY)		1
	7	★81-794-710-019	AM LOOP ANT (S) (H, HJ, G ONLY)		1
	8	★87-043-095-019	5M (SW) WIRE−ANT (S) (H, HJ, G ONLY)		1
	9	★87-049-137-019	PLUG SIEMENS (H, HJ ONLY)		1

CP−55 (H, E, Z)

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q'TY
	1	★81-631-904-019	INSTRUCTION BOOKLET (H) (H ONLY)	※	1
	2	★81-634-915-018	INSTRUCTION BOOKLET (E) (E, Z ONLY)	※	1
	3	★81-748-632-010	FM FEEDER ANT M (H ONLY)		1
	4	★87-043-097-010	FM FEEDER ANT (F) (E ONLY)		1
	5	★81-631-647-010	AM LOOP ANT (S) NC (E, Z ONLY)		1
	6	★81-794-710-010	AM LOOP ANT (S) (H ONLY)		1
	7	★87-043-095-019	ANT WIRE (H ONLY)		1
	8	★87-049-137-019	PLUG SIEMENS (H ONLY)		1

CDX−55(E)

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q'TY
	1	★81-634-915-018	INSTRUCTION BOOKLET (E)	※	1
	2	★84-739-901-018	INSTRUCTION BOOKLET (DX-M45)	※	1
	3	★81-631-647-019	AM LOOP ANT (S) NC		1
	4	★87-043-097-010	FM FEEDER ANT (F)		1
	5	★87-034-742-010	PIN CORD 2P-50		1